



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,801	03/15/2004	Wolfgang Burckhardt	F-8151	1614

28107 7590 06/28/2006
JORDAN AND HAMBURG LLP
122 EAST 42ND STREET
SUITE 4000
NEW YORK, NY 10168

EXAMINER

NGUYEN, CAM N

ART UNIT PAPER NUMBER

1754

DATE MAILED: 06/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/800,801		BURCKHARDT ET AL.	
	Examiner		Art Unit	
	Cam N. Nguyen		1754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on originally filed is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____. | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application No. 19841741.03 filed in GERMANY on 09/09/1998. It is noted, however, that applicant has not filed a certified copy of this foreign priority application as required by 35 U.S.C. 119(b).

Claim Objections

2. Claim 10 is objected to because of the following informalities:

It is suggested that applicants rewrite the claim in the manner as follow:

--Process according to claim 5, wherein the oxides and the mixed oxides of the catalytically active phase are produced by a wet process, said process comprises precipitating the corresponding metal carbonates, citrates, hydroxides, and/or oxalates, and subsequent drying and calcining by thermal decomposition of the precipitated product--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112 (Second Paragraph)

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 1754

4. Claims 10-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A. Claim 10 recites the limitation "the oxides and the mixed oxides" in lines 1-2.

There is insufficient antecedent basis for this limitation in the claim.

B. Claim 11 recites the limitation "the method of producing" in line 1. There is insufficient antecedent basis for this limitation in the claim.

C. Claim 12 recites the limitation "the method of producing" in line 1. There is insufficient antecedent basis for this limitation in the claim.

D. Claim 13 recites the limitation "said elements" in line 1. There is insufficient antecedent basis for this limitation in the claim.

E. Claim 14 recites the limitation "said elements" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102(b)

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Drago et al., "hereinafter Drago", (US Pat. 5,705,136).

Drago discloses a process for the decomposition of nitrogen oxides, comprising

Art Unit: 1754

contacting a nitrogen oxide with a mixed oxide catalyst under conditions effective to decompose the nitrogen oxide (N_2O) to nitrogen (N_2) and oxygen (O_2), wherein the catalyst comprises a first metal oxide selected from the oxide of Mn, Fe, Co, Ni, Cu, Zn, or mixtures thereof on a metal oxide support consisting essentially of MgO, CaO, etc., wherein the catalyst is prepared by contacting the support with the nitrate salt of said first metal oxide, and the catalyst is calcined prior to use under conditions effective to decompose to metal oxide, etc. (see col. 20, claims 1, & col. 21, claim 10). The support contains a metal oxide selected from the group consisting of MgO, CaO and mixtures thereof (see col. 21, claim 3). See also col. 21, claims 6-8. Further, the catalyst comprises cobalt oxide or copper oxide in an amount of from about 1 to about 10 weight percent based on the total weight of the catalyst (see col. 21, claim 9). See also Examples of the reference.

Regarding claims 1-2, 4, 7-10, 13-14, Drago discloses the claimed process, thus anticipates the claims.

Regarding claims 5-6 & 15, the claimed and the disclosed catalytically active metals amounts are overlapping with each other (or falling within each other ranges), thus the claims are met.

Regarding claims ³11-12 & 16-17, the claimed inorganic polymer or additive limitations in the claims are noted. It is considered the claimed inorganic polymer or additive is not present in the final catalyst composition since it is only used for stabilizing the metals in the solution during the process of making the catalyst.

If in fact, the claimed inorganic polymer or additive is contained in the final

catalyst, then the following rejection applies.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 3, 11-12, & 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Drago et al., "hereinafter Drago", (US Pat. 5,705,136) taken together with VerNooy (US Pat. 6,379,640 B1).

Drago discloses a process for the decomposition of nitrogen oxides as described above, except for the claimed inorganic polymer or additive and its concentrations.

However, it would have been *prima facie obvious* to one of ordinary skill in the art at the time the invention was made to have utilized such known additive material in the process of making the catalyst in Drago in order to stabilize the metals in the solution to achieve a stable catalyst because it is known and taught in VerNooy to do the same to make similar catalyst (see VerNooy at col. 10, claims 13-23).

Specifically, VerNooy teaches an amount of 0.2%-2% of P, as phosphate, is added to the solution during the catalyst preparation step (see VerNooy at col. 10, claim 21). While the amounts of additive disclosed by VerNooy is lower than the claimed additive amounts, it would have been obvious to one of ordinary skill in the art at the

Art Unit: 1754

time the invention was made to have optimized such amounts in order to achieve an effective catalyst, in view of *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Citations

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. All references are cited for related art. See PTO-892 Form prepared attached.

Conclusion

10. Claims 1-17 are pending. Claims 1-17 are rejected. No claims are allowed.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Primary Examiner Cam N Nguyen, whose telephone number is 571-272-1357. The examiner can normally be reached on M, W, R, & F, 9:00 AM - 6:30 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1754

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nguyen/cnn
June 23, 2006

Cnn


CAM N. NGUYEN
PRIMARY EXAMINER

Art Unit - 1754